

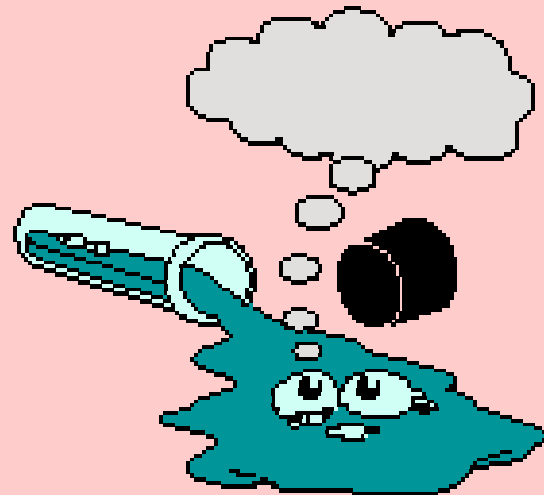


*LABORATORY FRAUD
PROSECUTIONS- Lessons Learned*

*USACE Chemist's Business Meeting
March 2002*

Public Health & Safety

- ▶ This must be first consideration
- ▶ Even if there's a potential to jeopardize evidence, if there is a health risk, it needs to be addressed



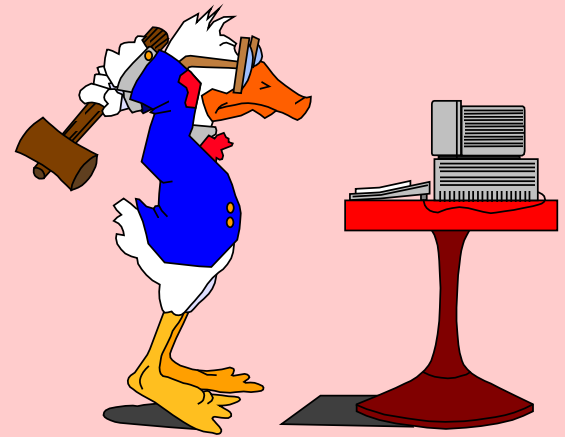
Two Basic Types of Lab Fraud

- Fraud committed in conjunction with, or at behest of, client
- Fraud committed against client



Lab Fraud Terminology

- ▶ Dry Labbing
- ▶ Pencil Whipping
- ▶ Peak Shaving
- ▶ Peak Enhancement
- ▶ Initial Calibration Curves
- ▶ Continuing Calibration Verifications (CCV)
- ▶ Time Traveling





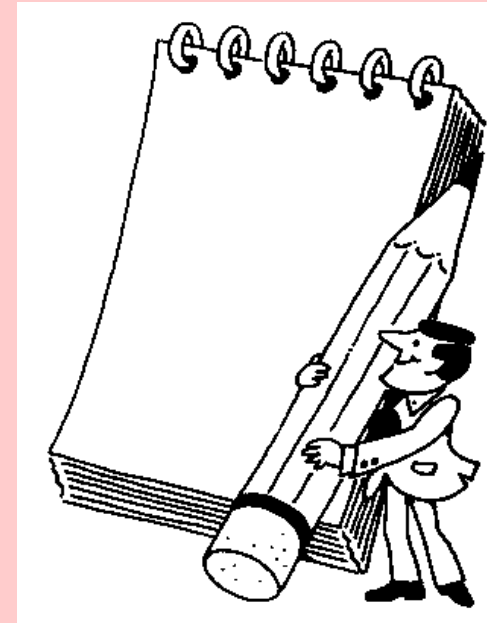
Dry Labbing



- Data reported without benefit of analysis
- Simple or sophisticated techniques
- Data results inferred based on past data or trends

Pencil Whipping

- Used to change results after analysis
 - Raw Data
 - Quality Control Data
 - Final Results





Peak Shaving/Peak Enhancement

- Used frequently in chromatographic analysis
- Used to add or subtract peak area in chromatogram
 - to change calibration curve or CCV's by increasing or decreasing peak area during quality assurance/quality control to make the instrument appear to be properly calibrated to conduct analysis



GC & GC/MS Peak Integration

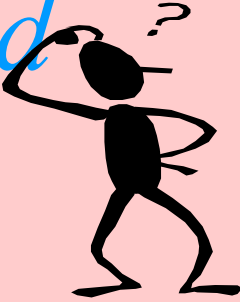
- ▶ Normally instrument software automatically integrates peak area
- ▶ Manual integration of peak is a valid tool and sometimes required
- ▶ However, manual integration simply to achieve QA/QC criteria not valid
 - done to eliminate need for proper maintenance, cleaning and re-calibration of instrument

Time Traveling



- ▶ Back dating the analysis time to meet holding time requirements
- ▶ Importing previously used calibrations, CCV's to make the instrument appear to have been properly calibrated and within control

Common Causes of Lab Fraud



- \$\$\$\$\$\$\$\$\$\$
- Management Pressure
 - increase production - lab over capacity
 - Make clients happy
- Difficult contractual requirements
 - low cost (low bid on contract)
 - low detection limit requirements/quick turn around for analysis

Common Causes of Lab Fraud

- ▶ Poor contract oversight
- ▶ Loss or lack of qualified technicians
- ▶ Unethical personnel
- ▶ Time constraints, laziness leading to “creativity in analysis”



Sources of Disclosure

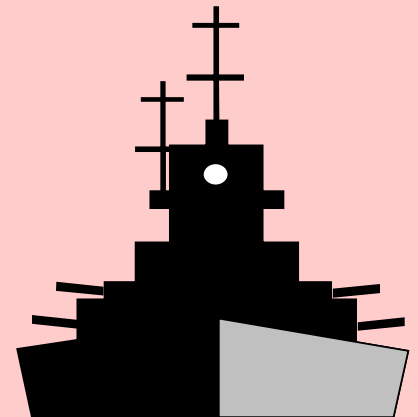


- Disgruntled lab employee
- Information received from outside sources
- Voluntary Disclosure by Lab
 - EPA Voluntary Disclosure Program
 - Possible reduction in civil liability
 - Possible relief from Criminal Prosecution for company
 - DOD Voluntary Disclosure Program
 - State Self Disclosure Programs



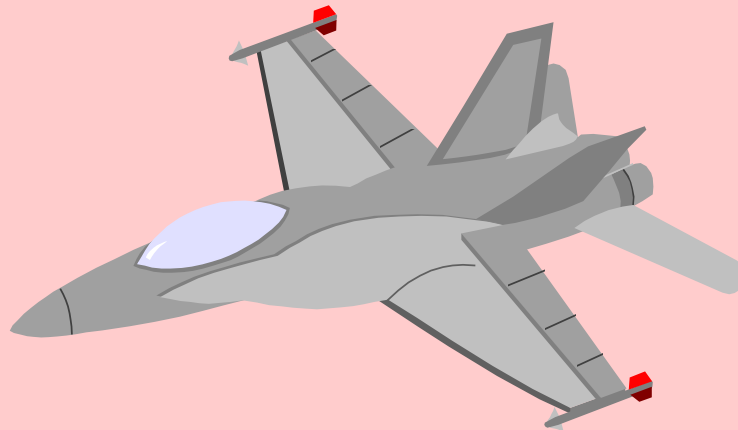
Intertek Testing Services (ITS)

- 3rd Largest environmental testing lab in country
- Full service environmental testing involving private and governmental clients through out United States
- Began as a Voluntary Disclosure
 - Reported they had found limited instances of peak manipulation in GC/MS department



ITS

- Stated problem was limited to 2 year period (96-97)
- Stated problem was limited to US Air Force contract work done for Air Force Center for Environmental Excellence (AFCEE)





Investigation



- ▶ Conducted initial meeting with lab to identify exact nature of disclosure and conducted initial interview and review of electronic data
 - immediately discovered falsified calibration data dating back to 1995
 - determined the conduct was not limited to the single contractor but was rampant throughout all client work

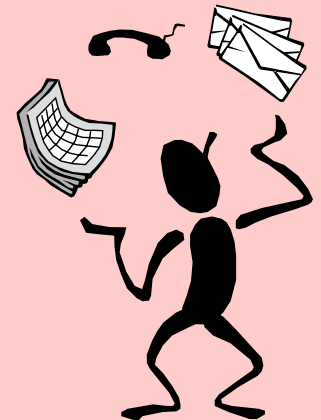
Investigation



- Determined ITS had 59,000 projects during period 1996-1997
- Involved over 250,000 samples
- Analysis ranged from groundwater, UST's, NPDES, hazardous waste, air toxics, explosives and chemical agents
- Analysis conducted from samples all over US impacting every EPA Region and most states

Data Concerns Health & Safety

- ▶ Based on potential for impact due to improper analysis
 - Coordinated with EPA Region 6 and immediately with EPA HQ
- ▶ Agency began attempting to prioritize overall data review
 - Uses by clients
 - Possible impact on regulatory/remedial efforts



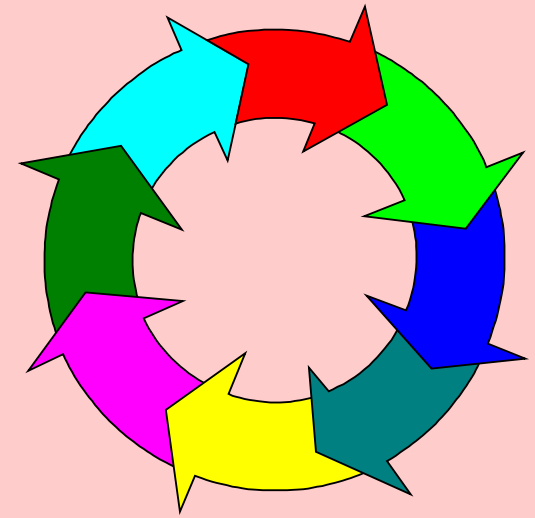
Data Concerns Health & Safety

- ▶ This is not just EPA problem. EPA does not, for the most part, regulate labs
- ▶ Review of data used by outside clients and then submitted to States or EPA was massive and involved every EPA Region
 - Decision on data usability - not one for Investigators - must tie in with regulatory authorities





Investigation



- Immediate concern was need to provide investigative results with Civil side of EPA/DOD so potential impact and health issues could be assessed
 - provided investigative results to regulatory community, states and government users regardless of possible impact on case

Investigation



- Interviews of current/former employees
 - Expanded scope of investigation, fraud present in GC Department, Air Toxics Department, HPLC Department and GC/MS Department dating back to 1991 and beyond
- Extensive data review on company computer system as all records were automated (Possible due to disclosure)

Investigation

- Investigation pursued as a Texas Environmental Enforcement Task Force case
 - DOD Agencies (DCIS, OSI, Army CID)
 - TNRCC Special Investigations
 - Texas Parks and Wildlife
 - EPA OIG
 - EPA CID



Investigation



- Early liaison with prosecutor (DOJ/ECS & US Attorney)
 - Identify possible charges
 - Conspiracy
 - False Statements
 - Mail/Wire Fraud
 - False Claims

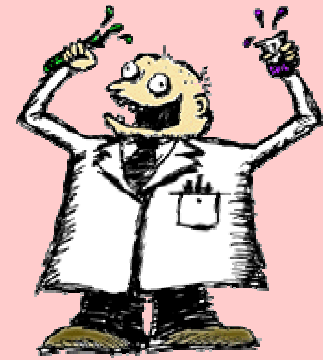
Investigation



- Identify strategy for case development
 - Restrict use of grand jury so information can be shared as needed for health/safety issues
 - Use of IG or administrative subpoenas
 - Need for search warrant execution to obtain evidence
 - as the result of misrepresentations by company
 - need for additional data/documents not relinquished



Investigation



- Determined need for additional lab audit support
 - Involved NEIC, Houston EPA Lab, TNRCC Technical personnel and Texas Parks and Wildlife Lab personnel
- Review lab practices and conduct additional data reviews
 - Must identify and use expert scientific support



Investigation



- Search Warrant executed and involved 60 agents and technical support personnel from the Task Force and NEIC.
 - Documents
 - Computer hard drives
 - Lab log books showing analysis data/corresponding calibration information and impacted client project numbers

Investigation



- Company still trying to operate
 - sensitive to shutting down operation
 - inability to seize computer systems/servers which held analytical data
- Did obtain tape back up of analytical data
 - Immediate problem with obtaining separate systems to load data on
 - Obtaining and using the analytical software to review data

Investigation



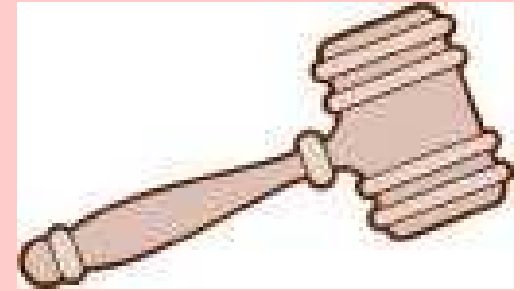
- Conducted data review using company computer system at facility during 1997-1998
- Learned that company was ceasing operation and was trying to sell computer systems
 - Executed 2nd search warrant - seized computer server
- Continued review of computer data from Aug99 through Sep2000

Investigation



- ▶ Case indicted Sep2000
 - 13 individuals (9 chemist, 4 managers)
 - declared complex litigation - trial set 10/01
- ▶ Company not included in original indictment
 - not allowed into disclosure program
 - engaged in plea negotiations at time of indictment

Disposition



- ▶ Corporate plea guilty Conspiracy 9mil in fine
- ▶ Five individuals (4 chemist, 1 manager) plead guilty
- ▶ 8 individuals went to trial
 - all evidence admitted into trial
 - confessions of 6 out of 8 individuals admitted
 - acquitted by jury

Significant Issues



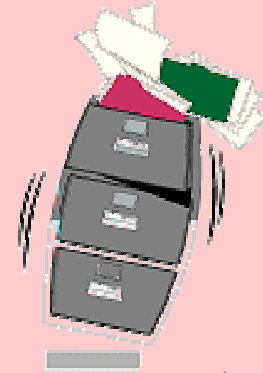
- Condition of lab at time of disclosure
 - lack of computer log on/log off control
 - bulk of data impacted, extremely poor paper work trail showing links- analyst & results
 - difficulty in linking a specific chemist with a specific act
 - they all indicated falsifications were so frequent they could not identify any specific project, analysis or contract they worked on

Significant Issues



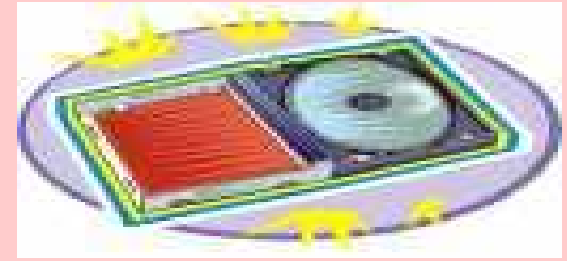
- ▶ Identifying the “Victim” Contractor who hired ITS or end user of analytical data
 - Many consulting firms resistant in identifying their clients due to their own liability exposure
 - inability to identify end use of data impacts for case development
- ▶ Cases where States or EPA had taken enforcement action based on ITS Data

Significant Issues



- Logistics of execution of large warrant
 - coordination of search assignments
 - document storage
 - document indexing and review
 - computer forensics
- Subsequent subpoenaed record retention
 - 1680 banker boxes / 125 banker boxes -clients
 - warehouse rental expenses

Significant Issues



- Second Search Warrant with seizure of computer server and systems
 - NEIC computer forensic personnel
 - Contractor hired to facilitate taking server off line and moving system
 - Mover hired to transport system to location
 - continued periodic access by company/defense
 - Climate controlled area for operating system
 - Security for system -evidence control

Significant Issues



- Coordination of basic law enforcement techniques with need for scientific involvement
 - contract requirements for work performed
 - EPA methodology requirements for type of analysis
- Tracking false calibrations or QA data to specific projects, to client identification to end user

Significant Issues



- ▶ Highly technical evidence trail and combination with scientific jargon difficult for jury
- ▶ Large number of defendants & Def Atty's
- ▶ Inability to show specific impact or harm as the result of fraudulent act (materiality)
- ▶ Large witness pool both lay person and expert
- ▶ Logistics outside control— pregnancy,

Significant Issues/Lessons Learned

- Presentation of scientific evidence where falsified differences are measured in small percentages - difficult to express impact to jury
- Summary chart
- Cost of investigation
 - Storage of seized records (excess of 20K)
 - Cost of seizing and moving computer (10K)
 - Acquiring copy of software used and training (10K)



Significant Issues/Lessons Learned

- Different level of intent in Title 18 Statutes as opposed to environmental statutes
 - Title 18: Specific Intent to Defraud
 - Environmental Statutes: General Intent “Knowing Conduct” (Knowledge with respect to the act, not to the law or regulation)
 - Willful Blindness Instruction

